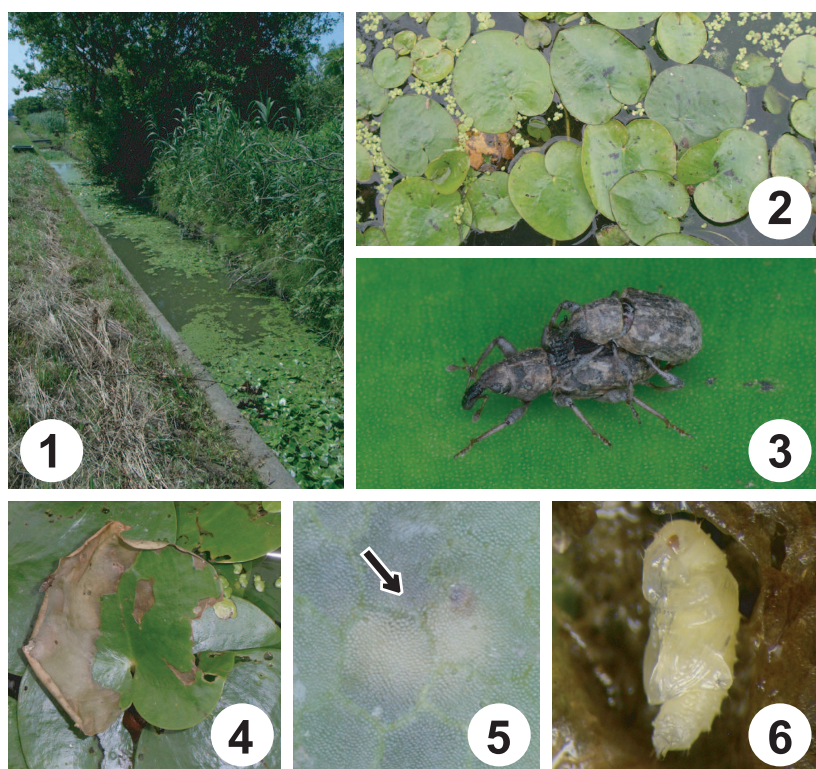


A Biological Note on *Bagous spiculatus* O'BRIEN et MORIMOTO (Coleoptera, Curculionidae)

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Bagous spiculatus O'BRIEN et MORIMOTO belonging to the subfamily Bagoinae is known to occur in Honshu and Shikoku, Japan (O'BRIEN & MORIMOTO, 1994). Although this species may feed on a certain aquatic or semi-aquatic plants as do other congeners, no information on its life



Figs. 1–6. *Bagous spiculatus*. — 1, A habitat in Kasumigaura, Ibaraki, Japan; 2, the host plant, *Hydrocharis dubia*; 3, a pair of adults copulating on a leaf of *H. dubia*; 4, a leaf of *H. dubia* heavily infested by larvae; 5, a larva (arrow) mining a leaf of *H. dubia*; 6, a pupa in a leaf bladder of *H. dubia*.

history has been reported until now.

Through my observations from early to late June 2009 in Kasumigaura, Ibaraki Prefecture, Japan, I confirmed that *B. spiculatus* is associated with *Hydrocharis dubia* (BLUME) BACKER (Hydrocharitaceae). The host plant is a floating macrophyte that is distributed in Japan from Honshu to the Ryukyus, Korea, China, Southeast Asia, and Australia. It occurs mainly in shallow freshwater bodies such as swamps and ponds.

In Ushiwata, Kasumigaura, *H. dubia* grew gregariously in a narrow irrigation canal along a lotus paddy field (Figs. 1, 2) and a number of *B. spiculatus* adults were observed feeding and copulating on its leaves (Fig. 3). The adults lived mainly on the leaves of *H. dubia* above the water surface, but they actively crawl about on the underwater portions of the plant. Female adults laid their eggs into young leaves. Hatched larvae grew in and fed on the leaves and leaf petioles (Fig. 4), making many holes and conspicuous mines on the leaves (Fig. 5). They are often observed moving on the outside of the host plant from one to another both above and below the water surface when the plant was heavily infested. The fully matured larvae pupated in the leaf petioles or bladders (Fig. 6).

The collection data for specimens examined herein are: 60 exs. (Specimen Nos.: 24-0465000~24-0465059), Ushiwata, 36°03'42.4"N, 140°19'22.8"E, 8 m, Kasumigaura, Ibaraki, Honshu, Japan, 7-VI-2009, H. YOSHITAKE leg., on *H. dubia*; 32 exs. (Specimen Nos.: 24-0465060~24-0465091), same locality, 20-VI-2009, H. YOSHITAKE & S. R. DAVIS leg., on *H. dubia*.

All specimens were identified by the author and mostly preserved in the National Institute for Agro-Environmental Sciences (NIAES) and partially in his private collection. The host plant was identified by N. NAKAHARA (Tsukuba) and the voucher specimen was deposited at the NIAES. Plant nomenclature followed YONEKURA & KAJITA (2003).

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References

- O'BRIEN, C. W., & K. MORIMOTO, 1994. Systematics and evolution of weevils of the genus *Bagous* GERMAR (Coleoptera: Curculionidae) II. Taxonomic treatment of the species of Japan. *Esakia, Fukuoka*, (34): 1-74.
- YONEKURA, K., & T. KAJITA, 2003. *BG Plants*. Available from: http://bean.bio.chiba-u.jp/bgplants/ylist_main.html (15 January 2010).